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Yoshihiro Katsumata

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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

TRAN, THAO T

ART UNIT

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1794

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

1. This is in response to the Reply filed on 12/03/2007.
2. Claims 17-22, 24-32 are currently pending in this application. No change in the claims has been made by this Reply.
3. In view of the prior Office action, the prior art rejection of claims 17-21, 25-31 is maintained. The objection to claims 22 as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form is sustained. And claim 32 remains allowable.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 17-21, 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haruta et al. (US Pat. 5,182,579) in view of Kinoshita et al. (US Pat. 6,045,741).

Haruta discloses an ink storing absorbent material for an ink jet made with a flexible polyurethane foam, where the foam is the reaction product of a polyol, an isocyanate, a catalyst, and a blowing agent (col. 1, lines 54-61). One embodiment shows foams having compression magnifications of 3 and cell numbers of 30-50 per inch (about 30-50 per 25 mm) (col. 15 lines 18-26). Haruta teaches the polyurethane foam is made in the presence of a surfactant (see col. 20, ln. 28-42), thus the polyurethane foam is impregnated with the surfactant and the surfactant would also inherently be present at and adhere to the surface of the foam. Figure 11 in the reference shows a compression magnification of 2 to 10 times, significantly overlapping the instantly claimed range.

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Although Haruta does not teach the ink permeation member and the ink absorbing member to be two different parts, it has been held that making separable parts would have been obvious in light of the integral part of the prior art, since the ink absorbent material of Haruta meets all the limitations in the presently claimed ink permeation and ink absorbing members. See MPEP 2144.04VC.

Haruta does not specify the amount of the surfactant used in the polyurethane foam.

Kinoshita discloses a polyurethane foam, comprising 1.5 parts by weight of a surfactant (foam stabilizer 1) in about 109 parts of total weight (see Table 1), which appears to read on the instantly claimed range.

Therefore, it would have been obvious to one of ordinary skill in the art to have used the amount of the surfactant, as taught by Kinoshita, in the invention of Haruta, since Kinoshita discloses that this amount has been conventionally used in the expansion of flexible polyurethane (see col. 4, ln. 7-12).

Allowable Subject Matter

6. Claim 32 is allowed.

7. Claims 22 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: no prior art has been found to teach, disclose, or fairly suggest an ink support, comprising an ink

permeation member comprising denaturated sodium succinate as the surface active agent; in combination with all of the other limitations in claim 17 or claim 32.

Response to Arguments

9. Applicant's arguments filed 12/02/2007 have been fully considered but they are not persuasive.

In response to Applicants' argument that the ink storing material in Haruta differs from the presently claimed ink supporter, it is noted again that the ink storing material of Haruta meets all of the limitations in the presently claimed ink permeation and ink absorbing members. Thus, although Haruta does not teach the ink permeation member and the ink absorbing member to be two different parts, it has been held that making separable parts would have been obvious in light of the integral part of the prior art. See MPEP 2144.04VC.

In response to Applicants' argument that the PU foams in Haruta are used to absorb and support excessive ink within the ink-jet cartridge when printing occurs, while they are used in the presently claimed invention after printing, it is noted that this argument is not grounded. Firstly, the claim language does not include when absorbing of ink occurs. Secondly, the ink storing material of Haruta includes all the limitations in the instant claim, it would inherently be an ink supporter as presently claimed. Note further that an ink storing material is an ink supporter.

Applicants further argue that the PU foams in Haruta do not have the same properties as presently claimed. However, it is first noted that the properties used in the argument, such as rate of absorbance and permeation of ink into the PU foams or capillary effect of absorbing, are not

included in the claim language. Secondly, as long as Haruta teaches the same PU foams as presently claimed, they would inherently have the same properties.

10. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

11. The same arguments are presented with respect to Applicants' argument directed to the combination of Haruta and Kinoshita.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton I. Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thao T. Tran/
Primary Examiner, Art Unit 1794

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